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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,122	07/27/2001	David E. Halasz	72255/05451	2229
23380	7590	11/12/2004	EXAMINER	
TUCKER, ELLIS & WEST LLP 1150 HUNTINGTON BUILDING 925 EUCLID AVENUE CLEVELAND, OH 44115-1475			REID, CHERYL M	
			ART UNIT	PAPER NUMBER
			2142	

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/917,122

Applicant(s)

HALASZ ET AL.

Examiner

Cheryl M. Reid

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1:121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

Claim Objections

1. Claim 1 is objective to because of minor informalities. Claim 1 states "determining whether the access point is one of a valid network access point is one of a valid network access point ." Examiner is assuming that this claim contains a typing error and assumes that applicant meant to write ""determining whether the access point is one of a valid network access point and a rogue..." This assumption is used for the interpretation of claim 1. Correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2,5-6, 8, 14, 19, 21,22, 25- 27 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Patel.

Claim 1 and 21

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4. Patel teaches of a method for detecting a rogue access point comprising the steps of :

- Directing a packet from a supplicant.... (Fig 3, Col 2, lines 14-16)
- Receiving a network response packet....(Fig 3, Col 2, lines 14-16)
- Determining whether the access point is one of a valid.....(Col 2, lines 44-46)

Claim 2 and 22

5.

- Patel teaches that if the access point is determined to be valid...(Col 2, lines 52-54,57-58)

Claim 5 and 25

6.

- Patel teaches that the predetermined expectations comprise data traffic conforming with IEEE 802.1X standards. IEEE 802.1X are standards relating to local or metropolitan area networks. Patel's invention can be implemented either in an LAN or MAN (Col 1, lines 53-54).

Claim 6

7.

- Patel teaches that the predetermined expectations comprise a mutual authentication to the network.....(Col 3, lines 23-32)

Claim 8 and 27

8.

- Patel teaches of directing a message containing identity....(Fig 3)
- Validating the identity credential.....(Col 4, lines 54-57)
- Forwarding a send key from the authentication server..... (Fig 3)
- Independently deriving a session key from the send key(Col 1, lines 55-56, 60-62). Although Patel didn't explicitly state that identity credentials of the supplicant and authentication server was used, this is implicitly taught because only the AC/HLR and the mobile knows the A-key; thus, knowing the A-key identifies the entity to the network.
- Encrypting data packets between the supplicant(Fig 2, Col 1, 60-63)

Claim 19 and 34

9.

- Patel teaches that the supplicantare part of a wireless local area network (Col 1, lines 28-29, lines 54-55)

Claim 26

10.

- Patel teaches about predetermined expectations comprise a mutual authentication.....(Col 3, lines 23-32). Although, he didn't explicitly state that non-conformity is determined by a failure of the mutual authentication it is implicitly implied throughout the discussion of the invention.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 and 28

12. Official notice is taken of credentials are a username/password combination of claim 9 and 28. Using username/password combination as credentials for gaining access to networks is very well known in the arts. It is common practice for a user to supply a username/password combination before gaining authorization to use a computer or get connected to a network.

Claim 16

13. Official notice is taken of configuring the supplicant in a network logon mode where the identity credentials are integrated into a network logon to enable a single-sign-on for network authentication and PC network logon of claim 16. It is well known and common to use a single sign-on to gain access to a PC and network authentication. This is done everyday in various types of environment such as college campuses and employment facilities in where a user uses a single-sign on to gain access to a specific computer and is allowed access to other computers in the network .

14. Claims 10, 14 and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Patel.

Claim 14

15. Patel teaches that the encryption parameters..... (Col 2, lines 26).

Claim 10 and 29

16. Patel teaches of sending an identity request message (challenge) from the access point to the supplicant; and wherein the step of directing a messages comprises sending a identity response message containing.....(Col 3, lines 23-32). Patel teaches of sending a start message (SR) and the credentials (R_N) at the same time (Col 4, lines 21-23). It would be obvious to one of ordinary skill in the art at the time of

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invention to modify Patel's invention to first send a start message (SR) before sending the credentials (R_N). This would offer added security because it would minimize the risk of unauthorized elements obtaining the supplicants credentials (R_N). It is for this reason that one skill in the art at the time of invention would be motivated to make the following improvements to Patel's invention.

17. Claims 7, 11-13, 17, and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patel as applied to claim 1 above, and further in view of Zhang.

Claim 7

18. Patel teaches about issuing a challenge from the server to the client.....(Col 3, 26-32). Patel also implicitly teaches that if calculated key does not match the key received, mutual authentication fails (Col 2, lines 45-46). Patel fails to teach about mutual authentication failing if the access point's username and password are not found in the server's database. Zhang teaches about Lucent ORiNOCO wireless LAN products wherein the authentication server is a RADIUS (Paragraph [0041], [0042]). It is an inherent characteristic of the RADIUS protocol that the RADIUS server has a database (or access to a database) that contains authentication information such as access points password and username. One of ordinary skill in the art at the time of invention would be motivated to add the above mentioned features to Patel's invention for the same reasons discussed in Claim 11.

Claim 17

19.

- Patel is silent in regards to configuring.....WEP mode.....
- Zhang teaches about Cisco's wireless LAN products configured.....WEP mode..... (Paragraph [0045]. lines (11-12) and providing the access point with authentication.....(Paragraph [0045]. lines (8-10).

It is an objective of Cisco's wireless LAN products to provide trusted mobile communications (Paragraph [0045]. lines (13-14). Patel's invention relates to updating secret shared data (Col 1, lines 28-29) for the benefit of providing increase secure communications over a wireless network. It is well known that one of the functions of the WEP protocol is to prevent unauthorized access to wireless networks. It is for this reason that one of ordinary skill in the art at the time of the invention would be motivated to add the above mentioned features to Patel's invention because it would result in a more secure wireless communication method.

Claim 11 and 30

20.

- Patel is silent in regards to the authentication server being a RADIUS.....

- Zhang teaches about Lucent ORiNOCO wireless LAN products wherein the authentication server is a RADIUSand wherein the identity response message.....(Paragraph [0042]. lines (13-15). Patel's invention relates to updating secret shared data (Col 1, lines 28-29) for the benefit of providing increase secure communications over a wireless network. Lucent ORiNOCO wireless LAN products relates to preventing others from listening to communications (Paragraph [0042]. lines (11-12). One of ordinary skill in the art at the time of the invention would be motivated to add the above mentioned features to Patel's invention because it would result in a more secure wireless communication method.

Claim 12 and 31

21.

- Patel is silent in regards to the steps of validating and forwarding comprise sending a supplicant a RADIUS.....
- Zhang teaches about Lucent ORiNOCO wireless LAN products wherein the steps of validating and forwarding comprise sending a supplicant a RADIUS..... (Paragraph [0042]. lines (7-9). One of ordinary skill in the art at the time of invention would be motivated to add the above mentioned features to Patel's invention for the same reasons discussed in Claim 11.

Claim 13 and 32

22.

- Patel is silent in regards to forwarding a send key comprising.....
- Zhang teaches about Lucent ORINOCO wireless LAN products that utilizes the RADIUS protocol. Supplying key length and key index are inherent characteristics of the RADIUS protocol. One of ordinary skill in the art at the time of invention would be motivated to add the above mentioned features to Patel's invention for the same reasons discussed in Claim 11.

Claim 33

23.

- Patel teaches that the encryption parameters..... (Col 2, lines 26).

24. Claims 3-4, 18, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patel as applied to claim 1 and 8 above, and further in view of D'Souza.

Claim 3 and 23

25.

- Patel is silent in regards to reporting the rogue access point.....
- D'Souza teaches about reporting to the network that a route has been withdrawn (i.e. become invalid) (Col 1, lines 52-54, 65-66). D'Souza's invention relates to

increasing the efficiency and accuracy of data communications (Col 2, lines 3-7).

Patel's invention relates to updating secret shared data (Col 1, lines 28-29) for the benefit of providing increase secure and reliable data communications.

Adding the above mentioned feature to Patel 's invention would be an improved modification because it would provide a more secure and reliable data communication system by allowing the system (network) to be aware of invalid (rogue) access point. It is for this reason that one of ordinary skill in the art at the time of invention would have been motivated to make the above modification.

Claim 4 and 24

26.

- Patel is silent in regards to contacting the network.....
- D'Souza teaches about contacting the network by the client (ORD) through a valid network access point (PEERMON server) (Col 3, lines 3-8). One of ordinary skill in the art at the time of invention would be motivated to add the above mentioned features to Patel's invention for the same reasons discussed in Claim 3.

Claim 18

27.

- Patel is silent in regards to setting up a user database.....and access point as a network access server. D'Souza teaches of setting up a user database.....(Fig 1,

item 26) and setting up the access point.....(Fig 1, item 28). D'Souza's invention relates to increasing the efficiency and accuracy of data communications (Col 2, lines 3-7). Patel's invention relates to updating secret shared data (Col 1, lines 28-29) for the benefit of providing increase secure and reliable data communications. Adding the above features to Patel's invention would result in a more reliable data communications system. It is for this reason that one of ordinary skill in the art at the time of invention would be motivated to make the above mention modification.

28. Claims 15, 20 and 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Patel as applied to claim 1 and 27 above, and further in view of Ayyagari.

Claim 15

29.

- Patel is silent in regards to configuring the supplicant device.....
- Ayyagari teaches in regards to configuring the supplicant device.....wherein identity.....for non-interactive authentication.....(Paragraph [0010], lines 8-12, Paragraph [0054], lines 3-6, Fig 6). Ayyagari's invention relates to wireless communication configuration and connectivity (Paragraph [0001], lines 1-3). Patel's invention relates to updating secret shared data (Col 1, lines 28-29) for the benefit of providing increase secure and reliable data communications in a

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wireless network environment. Adding the above mentioned features to Patel's invention would result in a more convenient and reliable communication system because it would limited the need for user interacton. It is for this reason that one skill in the art at the time of invention would be motivated to add the above features to Patel's invention.

Claim 20 and 35

30.


- Patel is silent in regards to the suppliant.....are part of a hard-wired local area network. Ayyagari teaches that his invention can be implemented both in a wired or wireless environment (Paragraph [0010], lines 4-7). Adding the above feature to Patel's invention would offer more flexible to users (i.e. users can be assured of increase secure communications regardless of wired or wireless connection). It is for this reason that one skill in the art at the time of invention would be motivated to add the above features to Patel's invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl M. Reid whose telephone number is 571 272-3903. The examiner can normally be reached on Mon- Fri (7-4:00) 2nd & 5th Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on (571)272-3896. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmr


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